

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code Cost-Plus-Fixed-Fee		Page 1 Of 11	
2. Amendment/Modification No. 04		3. Effective Date 2007APR17		4. Requisition/Purchase Req No. SEE SCHEDULE		5. Project No. (If applicable)	
6. Issued By U.S. ARMY TACOM LCMC SFAE-GCS-W-BCTP JOSEPH D'FELIO (586)574-6608 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: JOSEPH.DFELIO@TACOM.ARMY.MIL		Code W56HZV		7. Administered By (If other than Item 6) DCMA DETROIT U.S. ARMY TANK & AUTOMOTIVE COMMAND (TACOM) ATTN: DCMAE-GJD WARREN, MI 48397-5000		Code S2305A	
				SCD A PAS NONE ADP PT HQ0337			
8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) GM GDLS DEFENSE GROUP, LLC 38500 MOUND ROAD STERLING HEIGHTS, MI 48310-3260 TYPE BUSINESS: Large Business Performing in U.S.				<input type="checkbox"/>		9A. Amendment Of Solicitation No.	
				<input type="checkbox"/>		9B. Dated (See Item 11)	
				<input checked="" type="checkbox"/>		10A. Modification Of Contract/Order No. DAAE07-00-D-M051/0031	
				<input type="checkbox"/>		10B. Dated (See Item 13) 2006JUL28	
Code INLE2		Facility Code					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. Accounting And Appropriation Data (If required) ACRN: AB NET INCREASE: \$2,714,283.00							
13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS							
KIND MOD CODE: A It Modifies The Contract/Order No. As Described In Item 14.							
<input checked="" type="checkbox"/>		A. This Change Order is Issued Pursuant To: CHANGES FAR 52.243-2, ALT II The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.					
<input type="checkbox"/>		B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).					
<input type="checkbox"/>		C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:					
<input type="checkbox"/>		D. Other (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office.							
14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE SECOND PAGE FOR DESCRIPTION							
15A. Name And Title Of Signer (Type or print)				16A. Name And Title Of Contracting Officer (Type or print) SANDRA E. MCCARROLL MCCARROS@TACOM.ARMY.MIL (586)753-2072			
15B. Contractor/Offeror (Signature of person authorized to sign)		15C. Date Signed		16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		16C. Date Signed 2007APR17	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE				30-105-02		STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243	

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

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SECTION A - SUPPLEMENTAL INFORMATION

1. This Modification 04 to Delivery Order 0031 under Contract DAAE07-00-D-M051 is a Unilateral Modification under the Changes Clause at I-74 of this contract.
2. Pursuant to the Changes Clause, FAR 52.243-2 ALT. II, the contractor is hereby directed to begin work immediately to perform the MBCOTM Phase II requirements contained in Paragraph C.4.3 through C.4.3.6.9 of this Modification.
3. As a result of this Modification 04, Paragraph C.4.3 through C.4.3.6.9 are incorporated into Section C of this Delivery Order.
4. As a result of this Modification 04, CDRLs A327, A328 & A329 are incorporated into Section C of this Delivery Order.
5. As a result of this Modification 04, Section C of this Delivery Order is revised to incorporate all changes and corrections to the Scope of Work.
6. In accordance with the Changes clause, the contractor must assert its right to any further adjustment for the effort associated with the MBCOTM Phase II work described above no later than thirty (30) days after award of this Modification 04. Failure to agree to any further adjustment shall be a dispute under the Disputes clause of the contract.
7. This Modification 04, establishes CLIN 0001AC for MBCOTM Phase II Efforts.
8. As a result of this Modification 04, the total amount funded for CLIN 0001AC is \$2,714,283.00 as stated below:

Total Estimated Cost:

\$2,494,831.00

Total Estimated Fee:

218,297.00

Cost of Money:

1,155.00

Total Estimated Price:

\$2,714,283.00
9. As a result of this Modification 04, the total obligated amount for this Delivery Order 0031 under Requirements Contract DAAE07-00-D-M051 is increased by \$2,714,283.00, from \$1,600,000.00 to \$4,314,283.00.
10. The period of performance for this effort is from 18 April 2007 through 1 June 2008.
11. Except as stated above, all other terms and conditions of Contract DAAE07-00-D-M051 and Delivery Order 0031 remain unchanged and in full force and effect.

*** END OF NARRATIVE A 0006 ***

Name of Offeror or Contractor: GM GDLS DEFENSE GROUP, LLC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AC	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS				
	<u>MBCOTM DESIGN, TEST & DEVELOPMENT</u>	1	LO	\$ <u>2,714,283.000</u>	\$ <u>2,714,283.00</u>
	CLIN CONTRACT TYPE: Cost-Plus-Fixed-Fee NOUN: MBCOTM PHASE II PRON: W17GXR32X1 PRON AMD: 02 ACRN: AB AMS CD: P654818 CUSTOMER ORDER NO: MIPR7EDAT60217				
	Total Estimated Cost: \$2,494,831.00 Total Estimated Fee: 218,297.00 Cost of Money: <u>1,155.00</u> Total Estimated Price: \$2,714,283.00				
	(End of narrative B001)				
	<u>Packaging and Marking</u>				
	<u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin				
	<u>Deliveries or Performance</u> DOC SUPPL <u>REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD</u> 001 000000 3 <u>DEL REL CD QUANTITY DEL DATE</u> 001 1 01-JUN-2008				
	FOB POINT: Origin				
	SHIP TO: <u>PARCEL POST ADDRESS</u> (W90953) XR W4GG CBS X RICC SRA MSM DIR PM BRIGADE COMBAT TEAM TPF 11 MILE ROAD BLDG 231 WARREN MI 48397-5000				
MARK FOR: LTC KENT MOORHOUSE <u>CONTRACT/DELIVERY ORDER NUMBER</u> DAAE07-00-D-M051/0031					

Name of Offeror or Contractor: GM GDLS DEFENSE GROUP, LLC

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1.0 SCOPE. This Statement of Work (SOW) defines the effort for the design, development, integration, test, and fabrication of a Mounted Battle Command On The Move (MBCOTM) Mission Equipment Package (MEP) A-kit (vehicle installation kit). It includes the associated engineering, program management, human factors engineering, and integrated logistic support requirements. All design, development, and integration efforts performed under this SOW shall leverage design, development, and integration efforts done in support of the MBCOTM Interim Capability Package (ICP) MEP A-kit.

This SOW will be broken down into Phases which will define portions of the effort to design, develop, integrate, and test the MBCOTM MEP A-kit. Each Phase will be further defined through contract modifications as details pertaining to the MBCOTM MEP become available. The MBCOTM MEP is not currently defined and it is the intent of this SOW to maximize simultaneous design of the A-kit with the definition/design of the MBCOTM MEP.

C.1.1 Background. It is the intent of the U.S. Army to design and develop a MBCOTM MEP A-Kit that will be installed and integrated into a Stryker Commanders Vehicle (CV). The MBCOTM MEP will be installed and fielded as a retrofit kit to the Brigade Commanders (BDE CDR) CV for all Stryker Brigade Combat Teams (SBCTs). The MBCOTM MEP will provide enhanced communications by providing capabilities such as three (3) reconfigurable Battle Command workstations capable of controlling any Army Battlefield Command System (ABCS), on-the-move beyond line of sight communications, Voice over Internet Protocol (VoIP), one (1) additional folding air-guard seat and more.

C.2.0 APPLICABLE DOCUMENTS

C.2.1 Government Specifications, Standards and Handbooks

MIL-STD-881	Work Breakdown Structure for Defense Material Items
MIL-STD-882	Standard Practice for System Safety
MIL-STD-961	Standard Practice for Defense Specifications
MIL-STD-810	Environmental Engineering
MIL-STD-973	Configuration Management
	Stryker Performance Specifications

C.2.2 Non-Government Specifications and Standards (Reserved)

C.3.0 GENERAL REQUIREMENTS

C.3.1 The contractor shall design, develop, integrate, test, and fabricate an MBCOTM MEP A-kit that does not degrade the performance of the MBCOTM MEP as documented in the MBCOTM Specification, and retains or improves the existing fielded system performance level as documented in the Stryker Performance Specification.

C.3.1.1 All design, development, and integration for this effort shall be done with consideration for other programs/technologies to be integrated into a Stryker CV, which includes but is not limited to:

- Land Warrior/Mounted Warrior
- CREW (I & II)
- SLAT Armor
- Common Ballistic Shield (CBS)

C.3.2 Cost As An Independent Variable (CAIV) - RESERVED

C.3.3 Design to Vehicle Delta Production Price - RESERVED

C.3.4 Program Management. The Contractor shall use an Integrated Product and Process Development (IPPD) approach to manage all areas of this contract. The contractor shall, through participation in a Government/Contractor co-chaired Integrated Process Team (IPT) adhere to Concurrent Engineering Practices for the performance of this contract to share contract progress, execution issues and decisions with the Government on a continuous basis. This method will assist the parties in understanding the contract requirements, facilitate time issue resolution, and allow timely insight into contract performance.

C.3.4.1 Start of Work Meeting. The contractor shall conduct a Start Work meeting at the contractors facility no later than 30 days after contract award. The contractor shall present an overview of its entire contractual effort to include as a minimum: reviews, detailed development and delivery schedules; any required testing; and subcontractor award schedules/status.

C.3.4.2 Reviews. All reviews shall be conducted with Government participation, in accordance with the contractor defined Integrated Milestone Schedule (IMS). At least three reviews shall be conducted. At least one of the reviews shall be conducted at a Government facility. The contractor shall provide a minimum 14 day advance notice of a review to be conducted in a CONUS location. Seven days before a review, the contractor shall provide an agenda for the meeting. The review shall include the contractors cost/schedule/performance status. The contractor shall provide documentation of all items of discussion presented at the reviews IAW CDRL A280.

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C.3.4.3 Contract Funds Status Report (CFSR). The contractor shall prepare and submit a Contract Funds Status Report (CFSR) in accordance with CDRL A005.

C.3.4.4 Program Management Monthly Status Report. The contractor shall prepare and submit a Program Management Monthly Status Report IAW CDRL A281.

C.3.4.5 Government Furnished Information (GFI) / Government Furnished Equipment (GFE). The Government will provide additional information following the award of the MBCOTM contract (estimated to be February 2007).

C.3.4.6 System Requirements. The contractor shall design, develop, integrate, test, and fabricate an MBCOTM MEP A-kit that does not degrade the performance of the MBCOTM MEP as documented in the MBCOTM Specification, and retains or improves the existing fielded system performance level as documented in the Stryker Performance Specification.

C.3.4.7 Configuration Management. The Contractor shall update, as required, the Configuration Management (CM) Plan IAW the Requirements Contract DAAE07-00-D-M051. The contractor shall implement the configuration management of the MBCOTM IAW the Government-approved CMP. The contractors CMP shall include configuration identification, control, status accounting (for hardware, software, and documentation) and audits. The CMP shall address the structure of authority of the CCB. The contractor shall provide the updated CMP IAW CDRL A007.

C.3.4.8 Data Access. The Government shall have full access to the Integrated Data Environment established by the contractor to view all drawings and track engineering changes in the configuration management process. The Government shall be allowed to electronically access the Contractors technical data through the CIDS to review vehicle system technical data. Access is for the purpose of evaluating, test issues, contractor changes and proposals. The contractor shall flow-down to the Government any documentation provided by the subcontractor IAW CDRL A282.

C.3.4.9 Quality Assurance. The Contractor shall maintain a Quality Program for production and retrofit, as referenced in Section E. Changes to the Quality Assurance Program shall not be implemented without notifying the Contracting Officer.

C.3.4.10 Data Items. All data submitted under this contract shall be available electronically and in contractor format written in English, unless otherwise specified.

C.4.0 ENGINEERING

C.4.1 Phase I

C.4.1.1 The contractor shall perform an interior HFE analysis of the Stryker CV to determine feasibility of incorporating four forward facing workstations. Each workstation shall be able to interface with multiple ABCS applications (intel, maneuver, fires, situational awareness, etc.). Each workstation shall have a computer terminal with keyboard, display, point and click input device (mouse functionality), and voice communications interface. The HFE analysis shall adhere to MIL-STD-1472 and other Stryker performance requirements. If the HFE analysis shows that incorporating four forward facing workstations is not feasible, the contractor shall perform an analysis to show how three forward facing workstations can be incorporated. Reference CRDL A279.

C.4.1.2 The contractor shall perform a Space, Weight, and Power (SWAP) on the Stryker CV with four forward facing workstations resulting from the HFE analysis in C.4.1.1. The SWAP analysis shall identify physical space available within the CV for future MBCOTM C4ISR equipment (A-kit and B-kit). The analysis shall assume the two roadside workstation positions, FHMUX, and the NTDR have been removed from the vehicle. The analysis shall present current volume available and maximum volume available as well as considering relocation of existing C4ISR equipment to make most efficient use of the existing space. The analysis shall show the current CV's superset (less the removed equipment) C4ISR power consumption and show the known future loads in the analysis (CREW, Land Warrior/Mounted Warrior, etc.). The analysis shall be based on the 500 amp Niehoff alternator and new Power Distribution Panel (PDP) Modular PDP2 architecture. The identified space shall adhere to MIL-STD-1472 and other Stryker performance specification requirements. The analysis shall be broken into two parts identifying internal and external space locations. Reference CRDL A279.

C.4.1.3 The contractor shall perform necessary engineering design analysis to identify if the existing Environmental Control Unit (ECU) within the Stryker CV has enough BTU capacity to maintain the interior temperature between 50 degrees F and 90 degrees F with the addition of 220A of power being dissipated inside the vehicle from the 500A alternator. The analysis shall take into consideration solar heat load for the hull of the vehicle when the vehicle is operating in a natural environment described in the Stryker performance specification. Reference CRDL A279.

C.4.1.4 The contractor shall perform an analysis to identify options to upgrade the existing CV power distribution system and Power Entry Panel (PEP) connections to be able to accept shore power inputs. The upgrade options shall allow the Stryker CV to power all C4ISR components while connected to shore power at the halt. Reference CRDL A279.

C.4.1.5 The contractor shall perform a trade study to identify options to upgrade the existing ECU system within the Stryker CV to be able to operate at the halt from shore power and keep the current on the move capability. Reference CRDL A279.

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C.4.1.6 The contractor shall provide electrical, mechanical, and systems engineering support to PM SBCT during the initial phases of the MBCOTM MEP development by PdM MBCOTM.

C.4.1.6.1 The contractor shall provide recommendations on minimizing impacts to vehicle performance requirements due to the integration of the MBCOTM ICP MEP.

C.4.1.6.2 The contractor shall support a Vehicle Systems Analysis in the areas of vehicle mobility, survivability, Safety, and HFE.

C.4.1.6.3 The contractor shall provide existing vehicle documentation for Stryker CV in electronic contractor format. Existing vehicle documentation shall include but are not limited to:

- Interior and Exterior Vehicle CAD models
- Engineering Change Orders
- Parts Lists
- Vehicle One and Two Wire Drawings
- Vehicle Installation and Assembly Drawings

C.4.1.6.4 The contractor shall participate in bi-weekly project meetings as required.

C.4.2 MBCOTM Phase II Planning

C.4.2.1 The Contractor shall attend meetings and hold discussions as necessary to study the Stryker FSEP vehicle, the TARDEC MBCOTM ICP Vehicle, the Bradley MBCOTM A Kit components and attributes. These meetings/discussions will include the exchange of technical information with Contractor, Army and Navy engineers.

C.4.2.1.1 These efforts shall also address the additional requirements generated for the MBCOTM Increment I vehicle and the evolving capabilities versus the project timeline. They shall also address the feasibility of fitting the MBCOTM Increment I B-Kit equipment into the vehicle with forward facing seats.

C.4.2.1.2 The output of this task is to complete the analysis and prepare to meet for Alpha Negotiations to finalize a statement of work and agree to a price to complete that scope.

C.4.2.2 The Contractor shall prepare in advance and meet with PM SBCT NLT MARCH 15 2007 for Alpha Negotiations.

C.4.2.3 The Contractor shall Support the Alpha Negotiations process to include draft BOM and Engineering estimates of the effort in total. Target to complete Alpha Negotiations is 2 April 07.

C.4.3 MBCOTM Phase II - Increment 1

C.4.3.1 Requirement

The Contractor shall design, develop, integrate, and test the Mounted Battle Command on the Move (MBCOTM) Mission Equipment Package (MEP) A-Kit to the 5th SBCT configuration. The result of this requirement shall be a complete CV with the Increment 1 MBCOTM presented ready for test on or before the 31st of March 2008.

C.4.3.2 Design Approach

The approach for the design and integration effort will be a collaborative development effort between the Government and Contractor engineers to rapidly design and install the Mounted Battle Command on the Move (MBCOTM) Mission Equipment Package (MEP) onto the Stryker CV. It will be an iterative design process, a Rapid Prototyping Effort in order to achieve effective and efficient results. This will be accomplished using a small team of engineers and technicians to develop the MBCOTM MEP in a short time. This Rapid Prototyping Effort is to spearhead the design and install of the MBCOTM MEP and rearrange seating that hereafter will be produced according to the contractor production process.

C.4.3.3 Design

C.4.3.3.1 The Contractor shall design and develop the MBCOTM A-kit to host the B-Kit components as identified in the MBCOTM Increment 1 system architecture and Interface Control Documents supplied by USG.

C.4.3.3.2 The contractor shall design and develop three forward facing workstations that meet current Stryker performance specification and HFE requirements.

C.4.3.3.3 The Contractor shall ensure that each workstation incorporates a monitor, keyboard and pointing device as defined in the MBCOTM B-Kit system Architecture (SA)

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- C.4.3.3.4 The Contractor shall provide a NBC System for a total of 7 stations with MBCOTM package installed.
- C.4.3.3.5 The Contractor shall design an additional single crew seat capable for air guard duty in the rear right hand corner of the crew compartment
- C.4.3.3.6 The Contractor shall relocate the remaining CV common equipment on the racks to optimize space available for the mission equipment
- C.4.3.3.7 The Contractor shall design a new Power Distribution unit to control and distribute power to the new equipment. The new panel shall interface with the 500A Alternator kit.
- C.4.3.3.8 The Contractor shall design all necessary power cables for the new units.
- C.4.3.3.9 The Contractor shall design the mounting bracket and mechanical interface for the rooftop antenna. The location of this antenna will be as directed by PM SBCT by on CERDEC S&T
- C.4.3.3.10 The Contractor shall relocate the configuration items displaced by the removal of the bench seats.
- C.4.3.3.11 The Contractor shall design stowage capacity for 6 crew members.
- C.4.3.3.12 The Contractor shall leverage the following previous design efforts when possible
 - C.4.3.3.12.1 The existing fold down, side stowage seat design and Seatbelt integration used in other military combat vehicles, including the MC-B vehicle, Bradley Infantry Fighting Vehicle, and the LAV C2.
 - C.4.3.3.12.2 The design developed for the MBCOTM ICP vehicle
 - C.4.3.3.12.3 The design developed for the antenna mount on the MBCOTM ICP vehicle
 - C.4.3.3.12.4 The analysis from the MBCOTM Phase 1 effort
 - C.4.3.3.12.5 Any applicable designs resulting from MBCOTM ICP and FSEP efforts
- C.4.3.3.13 The MEP shall be applied as an installation kit.
- C.4.3.3.14 The FH Mux and NTDR shall be completely removed and the space vacated is available for this effort.
- C.4.3.3.15 The Contractor shall ensure that any welding performed to install the MEP, does not compromise the integrity of the spall liner or vehicle hull integrity.
- C.4.3.3.16 The MEP design shall operate in conjunction with SLAT, SRAT, CBS, and AOA.
- C.4.3.3.17 All parts for the initial vehicle shall be production representative.
- C.4.3.3.18 A Start of Work meeting is to be held at the Contractors facility in Michigan on 16 April 2007
- C.4.3.3.18 The Contractor shall participate in weekly status teleconferences with the Government and Government representatives.
- C.4.3.3.19 The Contractor shall develop installation instructions (Crew and Field Level Maintenance/Removal and Replacement of Components) and address all issues related to B-Kit integration.
- C.4.3.4 Increment 1 Deliverables
 - C.4.3.4.1 3 each complete MBCOTM Production Representative A-kit
 - C.4.3.4.2 Installation of 1 kit on vehicle
 - C.4.3.4.3 Support integration of one kit into TACOM SIL
 - C.4.3.4.4 Deliver 1 kit to the Auburn Warehouse
 - C.4.3.4.5 Draft B Kit Install instructions CDRL A328
 - C.4.3.4.6 Final B Kit Install instructions CDRL A328

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- C.4.3.4.7 Concept Design Package CDRL A327
- C.4.3.4.8 Preliminary Design Package CDRL A327
- C.4.3.4.9 Final Design Package CDRL A327
- C.4.3.4.10 Fully Released A Kit TDP CDRL A329
- C.4.3.5 Government Furnished Equipment, Information & Material
 - C.4.3.5.1 Draft System Architecture - To the Contractor by 18 April 2007
 - C.4.3.5.2 Performance specs including Space, Weight, and Power for B Kit - To the Contractor by 18 April 2007
 - C.4.3.5.3 Technical data package for MBCOTM ICP all systems - To the Contractor by 18 April 2007
 - C.4.3.5.4 Stryker CV to London with 500 AMP Alternator and Hawker Batteries (All shipping of the Stryker CV is provided by USG) - To the Contractor by 25 April 2007
 - C.4.3.5.5 Crew I & II A Kit TDP To the Contractor by 30 April 2007
 - C.4.3.5.6 Draft Component ICDs MBCOTM MEP - To the Contractor by 1 August 2007
 - C.4.3.5.7 Final System Architecture - To the Contractor by 1 September 2007
 - C.4.3.5.8 Final Component ICDs MBCOTM MEP - To the Contractor by 1 September 2007
 - C.4.3.5.9 B-kit Components - To the Contractor by 8 December 2007
- C.4.3.6 Delivery Schedule
 - C.4.3.6.1 Concept Design Package 15 August 2007
 - C.4.3.6.2 Preliminary Design Package 15 November 2007
 - C.4.3.6.3 Three (3) each complete MBCOTM Production Representative A-kits 31 March 2008
 - C.4.3.6.4 Installation Kit applied to the Government furnished CV and completed ready for test no later than 31 March 2008
 - C.4.3.6.5 Deliver 1 kit to the Auburn Warehouse 31 March 2008
 - C.4.3.6.6 Support integration of one kit into TACOM SIL 31 March 2008
 - C.4.3.6.7 Final Design Package 1 May 2008
 - C.4.3.6.8 B kit Install instructions 1 May 2008
 - C.4.3.6.9 Fully Released A Kit Technical Data Package (TDP) completed by 1 June 2008
- C.5 TECHNICAL REVIEWS
 - C.5.1 Design Review
 - C.5.1.1 A Concept Design Review shall be held at the Contractors Facility in London and shall be conducted IAW contractor format. The product of the review shall be delivered to the Government IAW CDRL A280 and shall consist of presentation of the technical effort completed in the Concept Phase. In addition, any outstanding technical issues or risks that may still need to be addressed in the Preliminary Design Phase shall be documented along with a plan for completion.
 - C.5.1.2 A Preliminary Design Review shall be held at the Contractors Facility in London and shall be conducted IAW contractor format. The product of the review shall be delivered to the Government IAW CDRL A280 and shall consist of presentation of the technical effort completed in the Preliminary Phase and evidence of preparedness to fabricate the A-Kit. In addition, any outstanding technical issues or risks that may still need to be addressed in the prior to the completion of the technical development and B-Kit build shall be documented.
 - C.5.1.3 A Final Design Review shall be held at the Contractors Facility in London. It shall consist of the complete description and

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presentation of the MBCOTM Increment I effort and all associated documentation.

6.0 PROGRAM REQUIREMENTS

C.6.1 Environmental Compliance. All activities shall comply with Federal, State and Local Environmental Laws and Regulations, Executive Orders, Treaties and Agreements.

C.6.2 System Safety Program. The contractor shall establish and maintain a system safety program in accordance with MIL-STD-882D, Standard Practice for System Safety. As a minimum, the contractor shall implement a system safety program that shall consist of conducting hazard analyses and assessments specified herein and establishing and maintaining a hazard tracking and risk resolution system for the entirety of the contract. The hazard tracking and risk resolution shall be an integral part of the IPT meetings to influence the MBCOTM MEP A-kit design. The contractor shall also support the Stryker System Safety Working Group (SSWG) by attending the SSWG meetings and be prepared to address the MBCOTM MEP A-kit hazards and how they have been mitigated.

C.6.3 Accident/Incident Report. As required, the contractor shall submit Accident/Incident Reports.

C.6.4 System Safety Hazard Analyses Report (SSHAR). The contractor shall perform System, Subsystem, and Operating and Support Hazard Analyses. Fault Tree Analyses to determine the probability of occurrence shall be conducted on all Severity Category I (Catastrophic) and Severity Category II (Critical) Hazards identified in the Hazard Analyses. Results of the Hazard Analyses shall be documented in the SSHAR and submitted in accordance with CDRL A112. The SSHAR shall be updated throughout the contract as the system design evolves.

C.6.5 Safety Assessment Report (SAR). The contractor shall conduct a safety assessment of the components, subsystems and system. A SAR is required prior to delivery of any system or component to the Government for testing or demonstrating. This may require preparation and delivery of more than one SAR. The SAR shall contain results from the contractors safety assessments, hazard analyses, and testing. The SAR shall also contain Range Safety recommendations for testing at Government facilities. The contractor shall update the SAR in accordance with CDRL A016.

C.6.6 Human Factors Engineering (HFE). The contractors HFE effort shall be an integral part of the design process to ensure that the soldier-machine interface facilitates safe and effective operation and maintenance by the full range of user personnel, while wearing the full range of Army Protective garments. Changes and modifications that affect the soldier-machine interface and soldier performance (for operator, maintainer, and support personnel) shall meet the appropriate HFE criteria and requirements, as verified by analyses, simulation, testing, and evaluation. The contractor shall evaluate the initial vehicles provided to assess capability to maximize system and human performance and combat effectiveness, and identify any shortfalls and implement appropriate resolutions. The contractor shall utilize MIL-HDBK-46855 as a guide for managing the Human Factors Engineering program.

C.6.7 Soldier Survivability. The contractor shall consider in design Soldier Survivability to ensure that all Soldier Survivability concerns, including reducing system-induced detectability, reducing fratricide, reducing potential threat-induced damage, reducing system induced soldier injury, and reducing system induced soldier fatigue, are met and verified by analyses, simulation, testing, and evaluation. The contractor shall brief Soldier Survivability design issues at the design reviews.

C.6.8 MANPRINT. The contractor shall address MANPRINT constraints and risks IAW AR 602-2 and MIS-PRF-53299 to ensure the MBCOTM can be operated and maintained efficiently and safely within existing manpower structure, personnel aptitudes, and training resource constraints. The contractor shall conduct a program integrating the activities of the seven domains of MANPRINT to influence system design decisions. The program shall also be coordinated with the engineering and ILS activities to achieve an integrated effort without duplication. The contractor shall provide update to MANPRINT programs at technical meetings and reviews.

C.7.0 TESTING (to be added by modification)

C.7.1 Contractor Tests

C.7.1.1 Contractor Technical Tests

C.7.1.2 Contractor Qualification Testing

C.7.2 Government Testing

C.7.2.1 Field Support Representative (FSR) Option

C.7.2.2 Contractor Test Support Package

C.8.0 LOGISTICS (to be added by modification)

C.8.1 Provisioning

C.8.1.2 Supportability Analysis

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-00-D-M051/0031 MOD/AMD 04	Page 10 of 11
Name of Offeror or Contractor: GM GDLS DEFENSE GROUP, LLC		

- C.8.1.3 Task Analysis
- C.8.2 Technical Data
- C.8.3 Logistics Efficiency
- C.8.4 System Training Program
- C.8.5 Training Plan, Training Aids and Devices
- C.8.6 Contractor Logistics Support (CLS)
- C.9 DELIVERABLES
- C.9.1 The contractor shall deliver the interior HFE analysis in contractor format no later than 27 October 2006. Reference CDRL A279.
- C.9.2 The contractor shall deliver the SWAP analysis in contract format no later than 27 October 2006. The SWAP analysis shall be broken down into two parts. The first identifying internal space allocations; the second identifying external space allocations. Reference CDRL A279.
- C.9.3 The contractor shall deliver the CV ECU analysis based on adding 220A of power dissipation in contractor format no later than 27 October 2006. Reference CDRL A279.
- C.9.4 The contractor shall deliver the shore power analysis in contractor format no later than 27 October 2006. Reference CDRL A279.
- C.9.5 The contractor shall deliver the ECU powered by shore power analysis in contract format no later than 27 October 2006. Reference CDRL A279.
- C.9.6 The contractor shall provide documentation of all items of description presented at reviews. Reference CDRL A280.
- C.9.7 The contractor shall prepare and submit a Contract Funds Status Report (CFSR.) Reference CDRL A005.
- C.9.8 The contractor shall prepare and submit a Program Management Monthly Status Report. Reference CDRL A281.
- C.9.9 The contractor shall provide the updated CMP. Reference CDRL A280.
- C.9.10 The contractor shall update the SAR. Reference CDRL A016.
- C.9.11 The contractor shall flow-down to the Government any documentation provided by the subcontractor. Reference CDRL A282.
- C.9.12 The contractor shall update the SSHAR throughout the contract as the system design evolves. Reference CDRL A283.

*** END OF NARRATIVE C 0002 ***

Name of Offeror or Contractor: GM GDLS DEFENSE GROUP, LLC

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ ITEM MIPR	ACRN	OBLG STAT/ JOB ORD NO			INCREASE/DECREASE AMOUNT		CUMULATIVE AMOUNT
0001AC	W17GXR32X1	AB	1	\$	0.00	\$	2,714,283.00	\$ 2,714,283.00
	P654818		760800					
	MIPR7EDAT6O217							
					NET CHANGE	\$	2,714,283.00	

SERVICE NAME	NET CHANGE BY ACRN	ACCOUNTING CLASSIFICATION	ACCOUNTING STATION	INCREASE/DECREASE AMOUNT
Army	AB	21 72040000065F5F01P654818255Y S28043	W15GK8	\$ 2,714,283.00
			NET CHANGE	\$ 2,714,283.00

		PRIOR AMOUNT OF AWARD		INCREASE/DECREASE AMOUNT		CUMULATIVE OBLIG AMT
NET CHANGE FOR AWARD:	\$	1,600,000.00	\$	2,714,283.00	\$	4,314,283.00

ACRN	EDI ACCOUNTING CLASSIFICATION
AB	21 070820400000 S28043 65F5F01P6548180000255YMIPR7EDAT6O2176QZZZS28043